



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,533	12/04/2003	Wang-Seok Son	1594.1283	5943
<div>21171      7590      05/24/2007</div> <div>STAAS &amp; HALSEY LLP</div> <div>SUITE 700</div> <div>1201 NEW YORK AVENUE, N.W.</div> <div>WASHINGTON, DC 20005</div>				
			<div>EXAMINER</div> <div>HECKERT, JASON MARK</div>	
			<div>ART UNIT</div> <div>1746</div>	<div>PAPER NUMBER</div>
			<div>MAIL DATE</div> <div>05/24/2007</div>	<div>DELIVERY MODE</div> <div>PAPER</div>

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/726,533	<b>Applicant(s)</b> SON ET AL.	
	<b>Examiner</b> Jason Heckert	<b>Art Unit</b> 1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on 01 March 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3,5,6,8-14,17 and 19-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-6,8-14,17,19-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see pages 5-6, filed 3/1/07, with respect to the rejection(s) of claim(s) 1, 9-12, 17, 19 under 35 U.S.C. 102(b) have been fully considered and are persuasive. Therefore, because of the amendments, the rejection has been withdrawn.
2. However, the argument that the stopping means, specifically a protrusion or abutment, is not well known is not found persuasive. The examiner stated previously that functionally equivalent devices were present in both Koji and Wolff, and that the mere inclusion of such a projecting stopper is an obvious modification, as tabs, abutments, projections, protrusions, stoppers, etc. are known in the art to impede movement. Therefore, the rejection under 35 U.S.C. 103 is maintained.
3. In order to further affirm this rejection, examiner is willing to present some known examples of such devices in the prior art. U.S. Patent 4,729,616 to Vogt discloses stop means 66 formed integrally with the frame extending at a right angle to prevent unwanted drawer motion. U.S. Patent 3,985,409 to Kneier discloses a tray rest 16 including an abutment or protrusion that allows cantilevers 14 to rest appropriately in a raised state. Kneier even discloses an arrangement that allows the tray to open up to an angle greater than 90 degrees. Thus, using protrusions on frames to prevent movement is well known.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1, 3, 5-6, 9-14, 17, 19-22 rejected under 35 U.S.C. 103(a) as being unpatentable over Nichols in view of Koji and further in view of Wolff. Nichols discloses a dishwasher 10, a cabinet 22, a rectangular base frame 26 adapted for rails 14 and 16. Said rails are provided for the attachment of rollers 18 and 20 which allow for the position of the rack assembly 30. Nichols also discloses numerous rotary members 38, 39, 40, 42 which are fixed to the frame to allow for the movement of the rack in a vertical manner. Rotary members 68 and 70 are fixed to the rack with pivotal attachments 72 and 74 to the rack, in a similar fashion as to how 38, 39, 40, and 42 are attached to the frame. These pivotal attachments can be considered hinge shafts. Nichols discloses rotary arms, but does not disclose a stopper or the rack rotating an angle substantially beyond a right angle. Koji discloses rotating arms attached to the top of a dishwasher frame capable of rotating a rack close to a right angle before some stopping means prevents further movement. Koji also discloses a drive means 17 for rotating the arms both forward and backward in a controlled manner. This serves as a functional equivalent to a dampener. Wolff discloses a rotating rack 63 in a storage apparatus where the rotating arms 72 and 92 are attached to the bottom of the apparatus. Wolff also discloses hinge mechanism 74 and 94 for allowing rotation of the

Art Unit: 1746

rack to a degree substantially beyond 90 degrees. In Fig. 6, the storage rack is shown rotated forward at an angle of about 110 degrees before coming to rest on stopping means 37 attached to the frame of the storage device. When rotated backwards, the rack comes in close contact with the frame of the apparatus, as well as the other internal components. A handle 77 is further included on the rack. It would have been obvious at the time of the invention, to modify Nichols and implement the rotary arms with driving means as taught by Koji to the bottom of the apparatus as taught by Wolff in order to allow the rack to rotate outward for easy access.

6. Both Koji and Wolff disclose some sort of means to stop movement of the rotating arms and are functionally equivalent to the stopper mentioned in said claims. Furthermore, stopping means are notoriously well known in the art for restricting movement in rotating devices to less than 360 degrees of rotation. It would have been obvious to modify Nichols in view of Koji and Wolff, as stated above, and include their means or any well-known means, such as extension tabs and abutments, to restrict the rotation of the rack.

7. Claim 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Nichols in view of Scian. Nichols does not disclose a handle for moving the rack. Scian discloses a handle 6 for a rack for use in a dishwasher. Both ends of said handle are mounted to the rack as shown in Fig. 1 in a hinged manner that allows for rotation. It would have been obvious at the time of the invention to modify Nichols and include a rotating handle, as taught by Scian, on the rack to facilitate the raising or lowering of the rack.

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Heckert whose telephone number is (571) 272-2702. The examiner can normally be reached on Mon. to Friday, 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1746

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMH

A handwritten signature in black ink, appearing to read 'Michael Barr', with a large, sweeping flourish at the end.

**MICHAEL BARR**  
**SUPERVISORY PATENT EXAMINER**